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Nonobstructive Oliguria

Differential Diagnosis

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• A review is presented of ten years' experience with the differential diagnosis of oliguria, utilizing the standard tests of renal function with the addition of the phenolsulfonphthalein excretion and urinary chloride measurements. The histories of 60 patients seen in consultation because of 24-hour urinary volume of less than 400 ml were studied in order to clarify the value of these tests. Particular attention was given to the postoperative "dilution state," the oliguria of which tends to mimic that of "acute tubular necrosis."

In only 25 per cent of the 60 cases was "acute tubular necrosis" responsible for the oliguria. In the remaining 75 per cent of patients, oliguria was due either to the effects of simple dehydration without tubular damage, or to tubular dysfunction on a physiologic rather than an organic basis. Thus, three out of four patients with oliguria required aggressive and specific fluid-electrolyte therapy, often with the intensive use of potassium. One out of four required the opposite in therapy—controlled dehydration without added potassium and, on occasion, peritoneal or extracorporeal dialysis, in order to allow six to ten days for tubular repair.

A 65-YEAR-OLD MAN with diabetes went into shock during an operation on the prostate gland. After the operation he was given generous amounts of dextrose in water parenterally before oliguria was discovered. Edema had appeared and the serum sodium value was 124 mEq per liter. A diagnosis of "acute tubular necrosis" (more commonly known as "lower nephron nephrosis") was made and a maintenance regimen was established. By the sixth postoperative day, the patient was comatose and in serious respiratory distress. His 24-hour urinary output remained at 200 cc and urinary specific gravity was constant at 1.010. At this time the urinary chloride was first measured and was found to be less than 5 mEq per liter. It was then recognized that so low a urinary chloride value was not compatible with "acute tubular necrosis," and the diagnosis was changed to "hypotonic overhydration." A 5 per cent salt solution given intravenously produced prompt diuresis and the patient recovered.

This case history demonstrates how the oliguria and uremia of a fluid electrolyte imbalance may mimic that of "acute tubular necrosis." In the former, prompt therapy with electrolytes and water is necessary; in the latter, a carefully managed regimen verging on dehydration is required if the patient is to survive. A history of shock, rising blood urea nitrogen level, and a small output of urine, proteinuria and a urinary specific gravity of 1.010, are often not diagnostic of the type of renal lesion present. The addition of two more tests, the measurement of phenolsulfonphthalein excretion and urinary chloride, may make the diagnosis clear.

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EDITORIAL

The Non-Member

WHAT DOES A MEDICAL SOCIETY do when a complaint is received from a citizen against a physician who is not a member of the society?

This question has long plagued medical societies in California and other states. The society has no jurisdiction over the physician in question. It has no legal or ethical right to make an order and be able to enforce it. It has no right to impose the Principles of Medical Ethics against a physician who, by reason of non-membership, has not embraced those principles and agreed to follow them.

Medical societies are established along geographical lines, generally within the borders of a county or a combination of two or more counties. They offer membership to all physicians who qualify by training, licensure and professional and ethical standards as eligible for membership. They remain strictly voluntary in nature and don't ordinarily set out to entice physicians into membership.

At the same time, medical societies (in California at least) have long followed the precept that a patient with a real or fancied grievance should be given a forum for the airing of his complaint. Today we expect to find a grievance or public service committee active in all component medical societies. And we expect these committees to act fairly in the consideration of claims made by patients. This is the one mechanism through which a medical society may review the circumstances of a situation where a misunderstanding between physician and patient may be explored and compromised. These committees serve the public and the profession very well.

To date the non-member physician has been outside the scope of this process. He has been able to remain apart in the knowledge that so long as he does not break the law he need not be governed by the code of ethics which physicians in organized medicine have embraced for the purpose of protecting the patient and preserving the best climate for the honest practice of medicine.

Last month a break in this train of responsibility was recognized by the executives of the component societies which comprise the great majority of society members in California. The Medical Executives Conference, made up of C.M.A. staff members and the full-time executives of a number of component societies, proposed that attention be paid to the non-member.

The conference proposed (1) that the component societies, under competent legal advice, proceed to act on complaints brought against non-member physicians; (2) that under special circumstances the component society may ask the C.M.A. to assume jurisdiction, and (3) that a study be made on means by which the public can distinguish between member and non-member physicians in each society's area.

The Council of the C.M.A. withheld action on the first two recommendations pending a report on this subject already under way by a standing commission, but approved the third item and asked the Medical Executives Conference to proceed on such a study. With an eye on the composition of this conference, we may expect prompt results from this study.

Good behavior by physicians is prompted but not guaranteed by several factors. The training of physicians gives them all an adequate indoctrination in this area. State laws proscribe certain practices. The Principles of Medical Ethics draw broad guidelines aimed at assuring that all physicians work within a framework of original responsibility to the patient and that fair and honest dealings be the rule of the day between physician and patient.

The physician who joins a component society agrees to follow the precepts set down by his peers. If he deviates, he subjects himself to the disciplinary proceedings set up in the constitution and bylaws of his society. We do not imply, of course, that all or